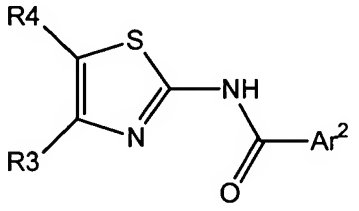
II. Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application, including replacement of the claims submitted with Applicants' amendment dated December 26, 2007.

Listing of Claims

Claims 1-4. (Cancelled)

Claim 5. (Currently amended) A 2-acylaminothiazole derivative represented by the following ~~general~~ Formula V or a pharmaceutically acceptable salt thereof:



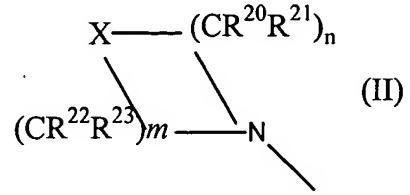
(V)

wherein the symbols have the following meanings:

Ar^2: a substituted or unsubstituted phenyl or monocyclic aromatic heterocycle (with the proviso that ~~indol-2-yl is excluded and that~~ when R^3 is aryl or pyridyl, each of which can be substituted with one or more groups selected from the group consisting of lower alkyl, -CO-lower alkyl, -COO-lower alkyl, -OH, -O-lower alkyl, -OCO-lower alkyl, and halogen, ~~and R^4 is a group represented by Formula II,~~ then Ar^2 is not phenyl or pyridyl, each of which can be substituted with one or more groups selected from the group consisting of lower alkyl, -CO-lower alkyl, -COO-lower alkyl, -OH, -O-lower alkyl, -OCO-lower alkyl, and halogen),

R^3: aryl or monocyclic aromatic heterocycle, each of which may be substituted,

R^4: a group represented by the ~~general~~ formula (II):



(II)

wherein the symbols have the following meanings,

n: is 2

m: is 2

($CR^{20}R^{21}$ and $CR^{22}R^{23}$ may be identical or different),

X: is a group represented by ~~N-R^{26} or C(-R^{27})-R^{28}~~ $C(R^{27})R^{28}$ or NR^{26},

Each of R^{20}, R^{21}, R^{22}, R^{23}, R^{26}, R^{27}, ~~or~~ and R^{28} is independently selected from the group consisting of –H; -OH; -O-lower alkyl; ~~optionally~~ a substituted or unsubstituted lower alkyl; ~~optionally~~ a substituted or unsubstituted cycloalkyl; ~~optionally~~ a substituted or unsubstituted aryl; ~~optionally~~ a substituted or unsubstituted arylalkyl; ~~optionally~~ a substituted or unsubstituted aromatic heterocycle; ~~optionally~~ a substituted or unsubstituted aromatic heterocyclic alkyl; ~~optionally~~ a substituted or unsubstituted nonaromatic heterocycle; ~~optionally substituted~~ lower alkenyl; ~~optionally substituted~~ lower alkylidene; -COOH; -COO-lower alkyl; -COO-lower alkenyl; -COO-lower alkylene-aryl; -COO-lower alkylene-aromatic heterocycle; carbamoyl or amino, each of which may be substituted with one or more groups selected from the group consisting of lower alkyl ~~and cycloalkyl, each of~~ which may be substituted with halogen, -OH, -O-lower alkyl, or -O-aryl; -NHCO-lower alkyl; and oxo.

Claim 6. (Cancelled)

Claim 7. (Previously presented) The compound according to claim 5, wherein R^3 is thienyl, which can be substituted; R^4 is a group represented by the general Formula (II); Ar^2 is phenyl or pyridyl, each of which can be substituted.

Claim 8. (Cancelled)

Claim 9. (Currently amended) The compound according to claim 5, wherein R^3 is phenyl or thienyl, each of which can be substituted with 1 to 3 halogen atoms; ~~(~~when substituted with 2 or 3 halogen atoms, the halogen atoms can be identical or different~~)~~.

Claim 10. (Original) The compound according to claim 9, wherein R^4 is 4-(piperidin-1-yl)piperidin-1-yl, 4-propylpiperidin-1-yl, 4-cyclohexylpiperazin-1-yl, or 4-propylpiperazin-1-yl.

Claim 11. (Previously presented) The compound according to claim 10, wherein Ar^2 is phenyl which is unsubstituted at 2- and 6-positions, substituted with -H, -F, -Cl, or -Br at 3-position, substituted with -F, -Cl, or -Br at 5-position, and substituted at 4-position; or pyridin-3-yl which is unsubstituted at 2- and 4-positions, substituted with -F, -Cl, or -Br at 5-position, and substituted at 6-position.

Claim 12. (Currently amended) The compound according to claim 11, wherein Ar^2 is phenyl which is substituted at 4-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, ~~optionally~~ a substituted or unsubstituted piperidin-1-yl and ~~optionally~~ a substituted or unsubstituted piperazin-1-yl; or pyridin-3-yl which is substituted at 6-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, ~~optionally~~ a substituted or unsubstituted piperidin-1-yl and ~~optionally~~ a substituted or unsubstituted piperazin-1-yl, ~~(~~wherein R^Y is lower alkyl which can be substituted with one or

more groups selected from the group consisting of -OH, -O-lower alkyl, amino which can be substituted with one or two lower alkyl, -CO_2H, -CO-lower alkyl, carbamoyl which can be substituted with one or two lower alkyl, cyano, aryl, aromatic heterocycle, nonaromatic heterocycle and halogen~~)~~.

Claim 13. (Currently amended) A compound selected from the group consisting of

N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-3-fluoro-4-hydroxybenzamide,

3-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl) thiazol-2-yl]-4-(2-hydroxyethoxy)benzamide,

N-[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperidino)thiazol-2-yl]-2-methoxyisonicotinamide,

~~N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]isoquinoline-6-carboxamide,~~

3-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl)thiazol-2-yl]-4-(2-hydroxyethoxy)benzamide,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-(3-hydroxypropoxy)nicotinamide,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-[(3-hydroxypropyl)amino)]nicotinamide,

1-(3-chloro-5-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid,

1-(3-chloro-5-{[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl) thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid,

N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-4-(4-cyanopiperidino)-3,5,-difluorobenzamide,

1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}phenyl)-piperidine-4-carboxylic acid,

1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}-6-fluorophenyl)piperidine-4-carboxylic acid,

1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl)thiazol-2-yl]carbamoyl}phenyl)piperidine-4-carboxamide,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-(4-hydroxymethylpiperidino)nicotinamide,

1-(3-chloro-5-{[5-(4-cyclohexylpiperazin-1-yl)-4-(4-fluorophenyl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid,

1-(3-chloro-5-{[5-(4-cyclohexylpiperazin-1-yl)-4-(3-trifluoromethylphenyl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-{4-[(2-methoxyethyl)carbamoyl]piperidino}nicotinamide,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-{4-[(3-methoxypropyl)carbamoyl]piperidino}nicotinamide,

5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-[4-(morpholinocarbonyl)piperidino]nicotinamide, and

~~a~~ pharmaceutically acceptable ~~salt~~ salts thereof.

Claims 14-17. (Cancelled)

Claim 18. (Currently amended) The compound according to claim 5, wherein the compound is N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-3-fluoro-4-hydroxybenzamide, or pharmaceutically acceptable salt thereof.

Claim 19. (Previously presented) The compound according to claim 5, wherein the compound is 3-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-4-(2-hydroxyethoxy)benzamide, or a pharmaceutically acceptable salt thereof.

Claim 20. (Previously presented) The compound according to claim 5, wherein the compound is N-[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperidino)thiazol-2-yl]-2-methoxyisonicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 21. (Cancelled)

Claim 22. (Previously presented) The compound according to claim 5, wherein the compound is 3-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl)thiazol-2-yl]-4-(2-hydroxyethoxy)benzamide, or a pharmaceutically acceptable salt thereof.

Claim 23. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-(3-hydroxypropoxy)nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 24. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-[(3-hydroxypropyl)amino)]nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 25. (Previously presented) The compound according to claim 5, wherein the compound is 1-(3-chloro-5-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

Claim 26. (Previously presented) The compound according to claim 5, wherein the compound is 1-(3-chloro-5-{[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl-)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

Claim 27. (Previously presented) The compound according to claim 5, wherein the compound is N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-4-(4-cyanopiperidino)-3,5,-difluorobenzamide, or a pharmaceutically acceptable salt thereof.

Claim 28. (Previously presented) The compound according to claim 5, wherein the compound is 1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}phenyl)- piperidine-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

Claim 29. (Previously presented) The compound according to claim 5, wherein the compound is 1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbamoyl}-6-fluorophenyl)piperidin-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

Claim 30. (Previously presented) The compound according to claim 5, wherein the compound is 1-(2-chloro-4-{[4-(4-chlorothiophen-2-yl)-5-(4-propylpiperazin-1-yl)thiazol-2-yl]carbamoyl}phenyl)piperidin-4-carboxamide, or a pharmaceutically acceptable salt thereof.

Claim 31. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-(4-hydroxymethylpiperidino)nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 32. (Previously presented) The compound according to claim 5, wherein the compound is 1-(3-chloro-5-{[5-(4-cyclohexylpiperazin-1-yl)-4-(4-fluorophenyl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

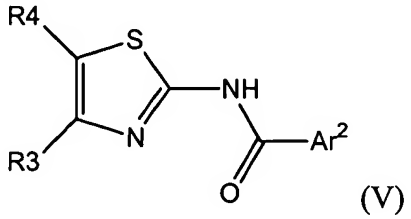
Claim 33. (Previously presented) The compound according to claim 5, wherein the compound is 1-(3-chloro-5-{[5-(4-cyclohexylpiperazin-1-yl)-4-(3-trifluoromethylphenyl)thiazol-2-yl]carbamoyl}-2-pyridyl)piperidine-4-carboxylic acid, or a pharmaceutically acceptable salt thereof.

Claim 34. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-{4-[(2-methoxyethyl)carbamoyl]piperidino}nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 35. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-{4-[(3-methoxypropyl)carbamoyl]piperidino}nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 36. (Previously presented) The compound according to claim 5, wherein the compound is 5-chloro-N-[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]-6-[4-(morpholinocarbonyl)piperidino]nicotinamide, or a pharmaceutically acceptable salt thereof.

Claim 37. (Currently amended) A 2-acylaminothiazole derivative compound represented by the following ~~general~~ Formula (V), or a pharmaceutically acceptable salt thereof:



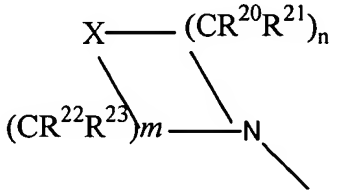
(V)

wherein the symbols have the following meanings:

Ar^2: ~~optionally~~ substituted or unsubstituted phenyl or monocyclic aromatic heterocycle, ~~with the proviso that indol-2-yl is excluded~~;

R^3: ~~an optionally~~ a substituted or unsubstituted thienyl;

R^4: a group represented by Formula II:



(II)

wherein X is $C(R^{27})R^{28}$ or NR^{26} and m=n=2;

wherein $CR^{20}R^{21}$ and $CR^{22}R^{23}$ can be identical or different; and

wherein each of R^{20}, R^{21}, R^{22}, R^{23}, R^{26}, R^{27}, ~~or~~ and R^{28} can be the same or different and can be selected from the group consisting of –H; -OH; -O-lower alkyl; ~~optionally~~ a substituted or unsubstituted lower alkyl; ~~optionally~~ a substituted or unsubstituted cycloalkyl; ~~optionally~~ a substituted or unsubstituted aryl; ~~optionally~~ a substituted or unsubstituted arylalkyl; ~~optionally~~ a substituted or unsubstituted aromatic heterocycle; ~~optionally~~ a substituted or unsubstituted aromatic heterocyclic alkyl; ~~optionally~~ a substituted or unsubstituted nonaromatic heterocycle; ~~optionally substituted~~ lower alkenyl; ~~optionally substituted~~ lower

alkylidene; -COOH; -COO-lower alkyl; -COO-lower alkenyl; -COO-lower alkylene-aryl; -COO-lower alkylene-aromatic heterocycle;
carbamoyl or amino, each of which can be substituted with one or more groups selected from the group consisting of lower alkyl ~~and cycloalkyl, each of~~ which can be substituted with halogen, -OH, -O-lower alkyl, or -O-aryl; -NHCO-lower alkyl; and oxo.

Claim 38. (Previously presented) The compound according to claim 37, wherein Ar^2 is phenyl or pyridyl, each of which can be substituted.

Claim 39. (Previously presented) The compound according to claim 37, wherein R^3 is a thienyl which is substituted with 1 to 3 halogen atoms, which can be identical or different.

Claim 40. (Previously presented) The compound according to claim 37, wherein R^4 is 4-(piperidin-1-yl)piperidin-1-yl, 4-propylpiperidin-1-yl, 4-cyclohexylpiperazin-1-yl, or 4-propylpiperazin-1-yl.

Claim 41. (Previously presented) The compound according to claim 37, wherein Ar^2 is phenyl which is unsubstituted at 2- and 6-positions, substituted with -H, -F, -Cl, or -Br at 3-position, substituted with -F, -Cl, or -Br at 5-position, and substituted at 4-position; or pyridin-3-yl which is unsubstituted at 2- and 4-positions, substituted with -F, -Cl, or -Br at 5-position, and substituted at 6-position.

Claim 42. (Currently amended) The compound according to claim 37, wherein Ar^2 is phenyl which is substituted at 4-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, ~~optionally~~ a substituted or unsubstituted piperidin-1-yl and ~~optionally~~ a substituted or unsubstituted

piperazin-1-yl; or pyridin-3-yl which is substituted at 6-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, ~~optionally~~ a substituted or unsubstituted piperidin-1-yl and ~~optionally~~ a substituted or unsubstituted piperazin-1-yl, wherein R^Y is lower alkyl which can be substituted with one or more groups selected from the group consisting of -OH, -O-lower alkyl, amino which can be substituted with one or two lower alkyl, -CO_2H, -CO-lower alkyl, carbamoyl which can be substituted with one or two lower alkyl, cyano, aryl, aromatic heterocycle, nonaromatic heterocycle and halogen.

Claim 43. (Previously presented) The compound according to any one of claims 5, 25 and 37 wherein the pharmaceutically acceptable salt is a maleate salt.

Claim 44. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of any one of the pharmaceutical compounds of claims 5, 7, 9-13 and 18-42 and a pharmaceutically acceptable carrier.

Claim 45. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 43 and a pharmaceutically acceptable carrier.

Claim 46. (Previously presented) The pharmaceutical composition according to claim 44, wherein the pharmaceutical composition is formulated for oral administration.

Claim 47. (Previously presented) The pharmaceutical composition according to claim 45, wherein the pharmaceutical composition is formulated for oral administration.